AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A vibration piezoelectric acceleration sensor ~~including an element~~ comprising:

a frame;

a first pair of ~~diaphragms~~beam shaped members linearly and oppositely disposed on the frame~~:~~, each beam shaped member including:

an under part electrode ~~successively stacked on the diaphragm~~;

a piezoelectric thin film; and

an upper part electrode;

a support body supporting each of the ~~diaphragms at~~first pair of beam shaped members, the support body being adjacent to one end of each ~~diaphragm:~~beam shaped member; and

a holding part holding the support body ~~in a slidable manner and~~ in a linear direction,

wherein the ~~diaphragms~~first pair of beam shaped members ~~are~~is extended and retracted by an acceleration transmitted to the support body through the holding part ~~of the element~~, ~~and~~

wherein the acceleration is detected through a change in a natural oscillation frequency of the ~~diaphragm~~first pair of beam shaped members, and

wherein the holding part is constructed and arranged in a meandering manner.

2. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein ~~a~~the first pair of ~~diaphragms~~ beam shaped members are linearly and oppositely disposed and define a first line that ~~crossing~~crosses ~~the~~a second line defined by a second pair of ~~diaphragms~~beam shaped members that are linearly and oppositely disposed on the frame, ~~for~~the first and second pair of beam shaped members configured to detect ~~detecting~~ acceleration in the direction of two axes ~~directions~~.

3. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein ~~a~~ the first pair of beam shaped members are configured to extend and retract, such that a difference in the natural oscillation frequency ~~between the pair of diaphragms is used as~~therebetween determines an acceleration signal.

4. (Cancelled)

5. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein each of the ~~diaphragm~~first pair of beam shaped members, the support body and the holding part are ~~all made of~~formed from silicon.

6. (Original) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein the piezoelectric thin film is made of PZT.

7. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein each of the first pair of the ~~diaphragm~~beam shaped members ~~is formed in a wedge shape, with~~has one end attached to the frame and one other end attached to the support body ~~like being hooked~~.

8. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein the upper part electrode formed on ~~the diaphragm~~each of the first pair of beam shaped members is extendedly formed along a center part ~~of the holding part formed in a wedge shape~~of a respective beam shaped member.

9. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein mass is added to the support body supporting ~~the diaphragm~~each of the first pair of beam shaped members.

10. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein a ~~pair of~~ detecting electrode and a driving electrode ~~are disposed as~~form the upper part electrode ~~formed on the diaphragm~~, the detecting electrode and the driving electrode being disposed symmetrically with respect to a central axis crossing a longitudinal direction of each of the first pair of ~~diaphragm~~beam shaped members equally dividing ~~the diaphragm~~each

beam shaped member.

11. (Cancelled)

12. (Currently Amended) A vibration piezoelectric acceleration sensor as defined in Claim 1, wherein the frame ~~constituting the element~~ is ~~attached~~configured to be attached to a main body, ~~like being held~~ so that static acceleration and dynamic acceleration can be detected.

13. (New) A vibration piezoelectric acceleration sensor including an element comprising:

a frame;

a first pair of beam shaped members linearly and oppositely disposed on the frame;

a second pair of beam shaped members linearly and oppositely disposed on the frame, said first pair of beam shaped members being disposed linearly on a first line that crosses a second line on which the second pair of beam shaped members are disposed, each beam shaped member including:

an under part electrode;

a piezoelectric thin film; and

an upper part electrode;

a support body supporting each of the beam shaped members, the support body being adjacent to one end of each beam shaped member; and

a holding part holding the support body in a linear direction, the holding part being located between one of the first pair of beam shaped members and one of the second pair of beam shaped members,

wherein each beam shaped member is extended and retracted by an acceleration transmitted to the support body through the holding part, and

wherein the acceleration is detected through a change in a natural oscillation frequency of each beam shaped members.

14. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein the first pair of beam shaped members and the second pair of beam shaped members are configured to detect acceleration in the direction of two axes.

15. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein the first pair of beam shaped members are configured to extend and retract, such that a difference in the natural oscillation frequency therebetween determines an acceleration signal.

16. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein the holding part is constructed and arranged in a meandering manner.

17. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein each beam shaped member, the support body and the holding part are formed from silicon.

18. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein the piezoelectric thin film is made of PZT.

19. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein each of the beam shaped members has one end attached to the frame and one other end attached to the support body.

20. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein the upper part electrode formed on each beam shaped member is extendedly formed along a center part of a respective beam shaped member.

21. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein mass is added to the support body supporting the beam shaped members.

22. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein a detecting electrode and a driving electrode are disposed as the upper part electrode formed on each beam shaped member, the detecting electrode and the driving electrode being disposed symmetrically with respect to a central axis crossing a longitudinal direction of each beam shaped member equally dividing each beam shaped member.

23. (New) A vibration piezoelectric acceleration sensor as defined in claim 13, wherein the frame is configured to be attached to a main body so that static acceleration and dynamic acceleration can be detected.